ATARATIRI

BUSINESS PLAN
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City of Toronto
Housing Department

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CONTENTS

FRONTISPIECE 1

MISSION STATEMENT 2

STRATEGIC OBJECTIVES: 1990-1991 3

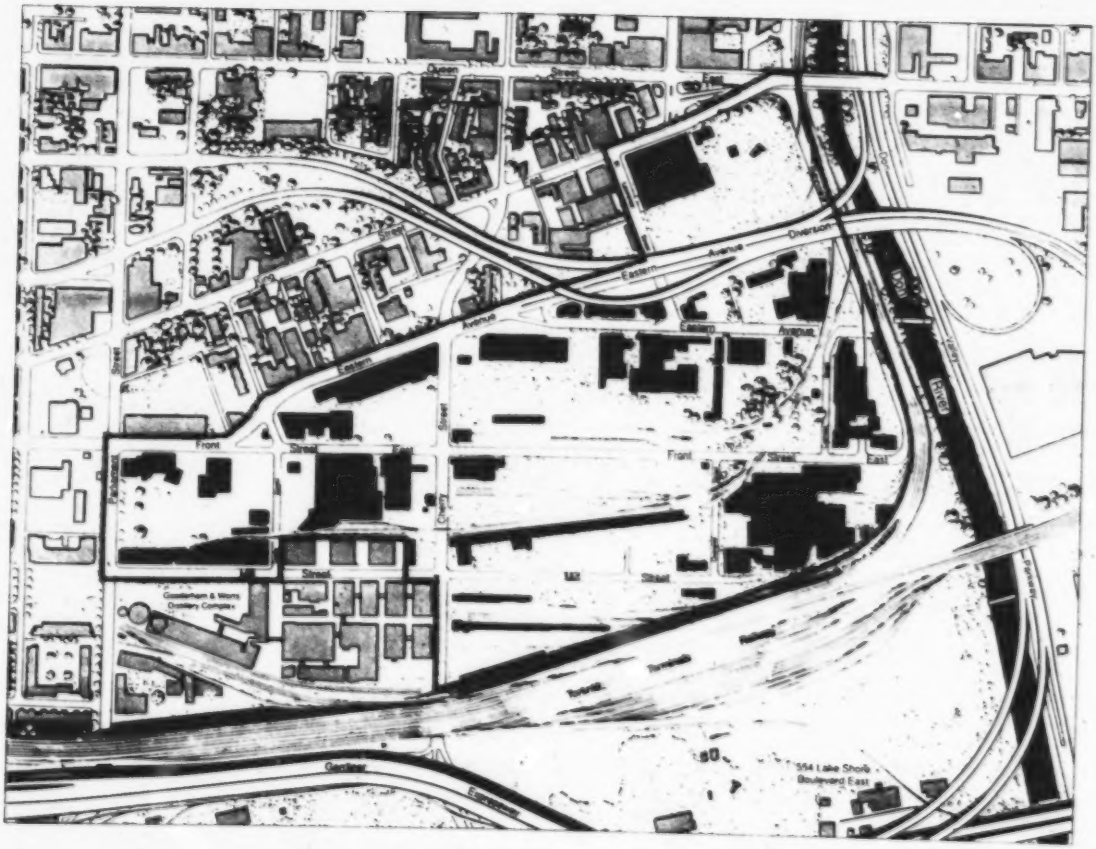
CHANGES IN THE ENVIRONMENT 4
- Economic and Financial Environment 4
- Housing Affordability and Supply Initiatives 7
- Industrial and Commercial Development Trends 11

THE DEVELOPMENT PROCESS:
A PROGRESS REPORT 15
- Land Assembly 15
- Railway Lands 15
- Relocation of Original Business Tenants 17
- Public Accessibility and Citizen Participation 19
- Research and Planning 20
- Environmental Planning 20
- Land Use and Urban Design 26
- Social Structure/Community and Social Services 28
- Workplace and Jobs 30
- Site Improvement and Servicing 32

FINANCE AND DEVELOPMENT PROGRAM 33
- Current Financial Picture 33
- Strategic Development Issues 34

CONCLUSION 41

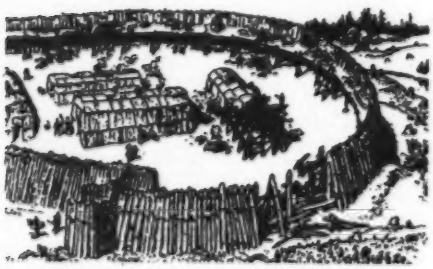
APPENDIX
- Cash Flow Projections: Tables 1-12 42


Queen
Street
Eastern
Avenue
Overhead
Eastern
Avenue
Front
Street
Front
Street
East
Street
Gooderham & Worts
Distillery Complex
554 Lake Shore
Boulevard East

FRONTISPIECE

In Huron, ATARATIRI means 'supported by clay' with deeper connotations related to clan and support. With the adoption of this name, the residents of ATARATIRI will have an all-Iroquoian address (Huron belongs to the Iroquoian family of languages): Canada is St. Lawrence Iroquoian for 'village'; Ontario is Huron for 'large lake' and Toronto is Seneca for 'tree', or 'trees in water'.

In July 1988, the City of Toronto and the Province of Ontario entered into a Housing Development Agreement (H.D.A.) as a bold response to the worsening housing situation in the City. The H.D.A. forged a commitment to add significantly to the stock of affordable housing in the central area of Toronto through the redevelopment of a 32.5 hectare site bounded by Parliament Street on the west; Front Street East, Eastern Avenue, St. Lawrence Street and King Street East on the north; Bayview Avenue on the east; and the rail corridor on the south (excluding the Gooderham & Worts Distillery site).



MISSION STATEMENT

ATARATIRI will be a socially and demographically balanced and environmentally sound community for 12,000 to 14,000 people. The neighbourhood will provide housing which is accessible to all income groups and will contain a full range of services and facilities geared to the present and future needs of its residents. A stable base of industrial and commercial employment opportunities will be generated for at least 1,500 people.

STRATEGIC OBJECTIVES: 1990-1991

1) Complete land assembly by the end of 1990.
2) Complete the Environmental Evaluation Study by mid-1990 for presentation to the Ministry of the Environment and begin the environmental remediation process in late 1990.
3) Obtain Special Policy Area (S.P.A.) designation from the Metropolitan Toronto and Region Conservation Authority in 1990 for flood plain development control.
4) Have the appropriate planning policies and controls in place in 1990.
5) Prepare a social and community services development strategy and obtain commitments from service providers.
6) Create an effective economic development and employment strategy that will ensure a healthy mix of industrial and commercial activities.
7) Ensure that, by the time the neighbourhood is fully developed, the maximum units possible are developed for low and moderate-income people.
8) Plan and implement the development of ATARATIRI in a fiscally-responsible manner and ensure that the project is self-financing to the maximum extent possible.
9) Arrange mid-term (5 years) financing by the middle of 1990.
10) Prepare and initiate the development program by mid-1991 and have some residents on the site by 1992.

CHANGES IN THE ENVIRONMENT

ATARATIRI is a complex undertaking that will require a number of years to complete. During that time, it will be important to monitor and interpret changes in the economic, social, housing and governmental environments which will have a bearing on the planning and development process and, ultimately, on the success of the neighbourhood.

ECONOMIC AND FINANCIAL ENVIRONMENT

The strong performance of the regional economy of southern Ontario continued in 1989; although, there was some evidence of a slowdown late in the year. Contributing factors to this economic slowdown have been continuing high interest rates and strict budgets passed by the Federal and Ontario governments. Re-allocation of government spending and new taxation measures have featured prominently in recent budgets.

The February 1990 federal budget, which placed a ceiling on the Canada Assistance Plan contributions to Ontario, is anticipated to have a major impact on provincial social expenditures. The Social Planning Council of Metropolitan Toronto has estimated the cost to Ontario resulting from a five percent cap on federal/provincial social welfare transfers for health care, post-secondary education, housing and a number of social service programs, will be $155 million in 1990 and $185 million in 1991. Federal cuts to housing programs will mean that 1,200 fewer social housing units will be built in Ontario during the next two years. Unfortunately, this fiscal situation will not improve the quality of life of the poor and disadvantaged.

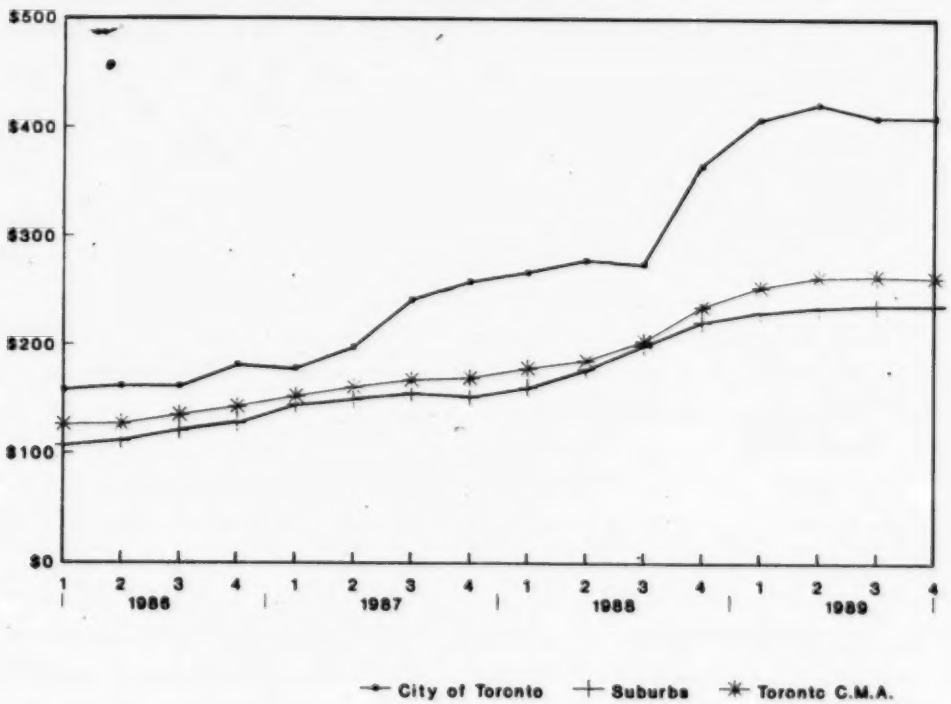
As a result of the withdrawal of federal support, increasing responsibility has fallen to the Province of Ontario to make up the shortfall in the funding of social assistance programs. Recent comments by the Ontario Minister of Community and Social Services suggest that the province will continue its ambitious program of social assistance reform started in 1989 despite limited federal participation. The recent provincial budget re-affirmed this commitment to social welfare reforms.

Another federal policy which has major implications for the economic environment in which ATARATIRI operates has been the vigorous pursuit of high interest rates to moderate inflation. While the inflation rate remained relatively constant during 1988, at 4.1%, 1989 saw the national inflation rate grow to 5.1%. Toronto's inflation rate in 1989 has been estimated at 6.2%. A lower rate of inflation is forecast for 1990 as the economic slowdown results in higher unemployment thus dampening pressure for larger wage gains. Lower interest rates are predicted late in 1990 in response to a lower rate of inflation but the continued escalation of rates at the present time may have a significant effect on the mid-term financial picture for ATARATIRI.

Changes in the financial/economic environment, at least in the short term, present significant challenges for the development of ATARATIRI. Of particular concern is the continuing commitment of the Federal government to high interest rates and austerity budgeting. Inevitably, the social sector of the economy is hit hardest in such times. This further increases financial pressures on the provincial and municipal levels of government.

FIGURE 1

Average price per square foot of new condominium units in the Toronto Region

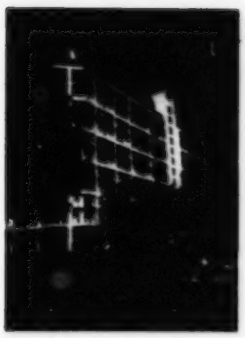


(Source: Urbanation Inc., January 1990)

HOUSING AFFORDABILITY AND SUPPLY INITIATIVES

Rapid escalation in housing costs and the resulting erosion of housing affordability have emerged as critical issues in Toronto in the 1980s. Significant price increases in the housing market have adversely affected first-time home buyers. In 1985 the Toronto Real Estate Board reported an average house price of $119,472. The equivalent figure in October, 1989 was $280,767, an increase of 135%.

The Royal Bank of Canada, in its publication *Econoscope* (May 1989), reported that 79% of Toronto households had an income lower than the minimum needed to qualify for a 75% mortgage on an average bungalow. The report further concluded that the Toronto housing market is becoming accessible only to high net worth, high income households and investors.



For many first-time home buyers the condominium market has proven an attractive alternative. However, a substantial gap exists between the average price per square foot for new condominium projects in the City of Toronto and the surrounding municipalities in the greater metropolitan area (Figure 1). This price gap widened significantly in 1988 and 1989. The result is that it became increasingly difficult for the first-time buyer to purchase a condominium apartment in the City of Toronto. However, as a result of the economic slowdown in late 1989 some price relief is possibly in sight. There was a dramatic drop in sales in the last quarter of 1989, which left many completed and unoccupied condominium units

TABLE 1

Average Rents of All Units and Vacant Units, Private Apartments, Six Units and Over, Toronto CMA, October 1988 and 1989

	ALL UNITS		VACANT UNITS	
UNIT TYPE	OCTOBER 1988	OCTOBER 1989	OCTOBER 1988	OCTOBER 1989
Bachelor	$409	$433	$ 482	$ 539
1-Bedroom	$493	$528	$ 751	$ 781
2-Bedroom	$596	$643	$1053	$1024
3-Bedroom	$738	$789	$1082	$1166

(Source: Canada Mortgage and Housing Corporation, 1989)

TABLE 2

Average Rent by Bedroom Size, Condominium Apartments, City of Toronto, May 1988

UNIT SIZE	AVERAGE UNIT SIZE		AVERAGE RENT/MONTH	
	Sq.M	Sq.Ft.	@ $0.95/Sq.Ft	@ $1.05/Sq.Ft.
Bachelor	44.7	481.5	457.43	505.58
1-Bedroom	83.0	893.5	848.83	938.18
2-Bedroom	125.3	1349.2	1281.74	1416.66
3-Bedroom	141.0	1517.7	1441.82	1593.59
4-Bedroom	178.4	1920.3	1824.29	2016.32

(Source: City of Toronto Planning and Development Department, Condominium Monitor '88, p.29)

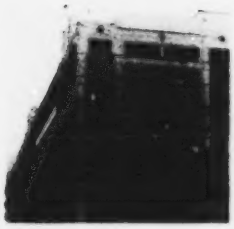
on the market. Since the current market slowdown is expected to continue well into 1990, it is anticipated that the condominium market will adapt to meet the needs and budgets of first-time home buyers, and to the affordability thresholds of other buyer groups.

The high cost of buying a home has placed considerable pressure on the rental housing market. Vacancy rates are persistently low ranging between 0.1% and 0.3%. Large rent increases have occurred in certain sectors of the rental market, further compounding the affordability problem for those households with low and fixed incomes. Table 1 compares the average rents of all units and vacant units in the Toronto CMA for 1988-1989. The rental charge for vacant units is significantly higher than for all occupied units. Units in non-condominium rental apartments rent at considerably lower rates than condominium units (Table 2). This can be accounted for by the larger unit sizes, greater variety of facilities and services offered in condominium buildings and the fact that they are among the most recent units to be offered on the private rental market.

Waiting lists for social housing continue to grow. In March 1990, over 14,000 households were on the waiting list of the Metropolitan Toronto Housing Authority; 7,000 households were on the Cityhome waiting list. Current estimates place the number of homeless in Toronto at 10,000 persons. In response to the increasing demand for social housing, the Province has made commitments to provide funding for up to 6,200 social housing units in the City of Toronto. The Province has already committed allocations for at least 2,450 units in ATARATIRI.

However, to meet projected needs, especially in a fiscally-tight environment, further provincial and federal commitments will be critical.

In addition to ATARATIRI, a number of housing initiatives of a similar nature are on-stream in Metropolitan Toronto. Over the next few years these initiatives should create approximately 6,500 units of non-profit and affordable housing. In the City of Toronto several sites are being developed for affordable and non-profit housing: the Bathurst-Spadina Neighbourhood, the St. Lawrence Neighbourhood (Phase C-2), the Jarvis/ George development site and the Sears Catalogue Building development site. Bathurst-Spadina, a 21 acre site, has been designated for medium-density housing and of the 3,157 housing units proposed 1,947 will be developed as social housing. The other three development sites will produce about 1,300 units of social housing by 1994.



The other large-scale redevelopment initiatives taking place in Metropolitan Toronto are concentrated largely in Etobicoke. The site of the former Lakeshore Psychiatric Hospital is to be redeveloped for a neighbourhood of 2,157 housing units. Of the 1,939 rental units to be constructed, it is proposed that rents in 969 units will be set at affordable levels with the remainder set at market levels. The ownership component will consist of 218 townhouses. Another major development initiative is the 20 acre former Goodyear Tire site. Approximately 40% of the 2,050 housing units will be assisted.

Etobicoke Harbour Village, located on the 15 acre

McGuiness Distillery site, is proposed as a mixed housing development of 1,700 units. The housing unit mix will be 60% market, 7% affordable ownership (condominium) and 33% social. The Long Branch development, located on a 29 acre site, east of Brown's Line along Lakeshore Boulevard, will contain 3,300 residential housing units, of which 828 will be affordable. All of these initiatives are important to meet the critical need for affordable housing in Metropolitan Toronto and should help relieve some of the pressure on the City of Toronto for providing the bulk of the affordable housing in the area.

INDUSTRIAL AND COMMERCIAL DEVELOPMENT TRENDS

High construction and rental costs were not restricted to the housing sector in 1989 but were also experienced in the industrial and commercial property sectors. This factor has led a number of firms to weigh the costs and benefits of a Toronto location. Trans-Canada Pipelines Ltd., has cited high operating costs as a factor in its decision to relocate to Calgary. The high cost of housing and increasing traffic congestion have been cited as important contributing factors to the decentralization of offices across the suburbs. Thus, in addition to the incentive of lower rents, many firms are now taking employee quality of life factors into account in their location decision-making.

Many major business companies with a national and international profile, especially in the areas of finance, insurance and real estate, continue to value a central

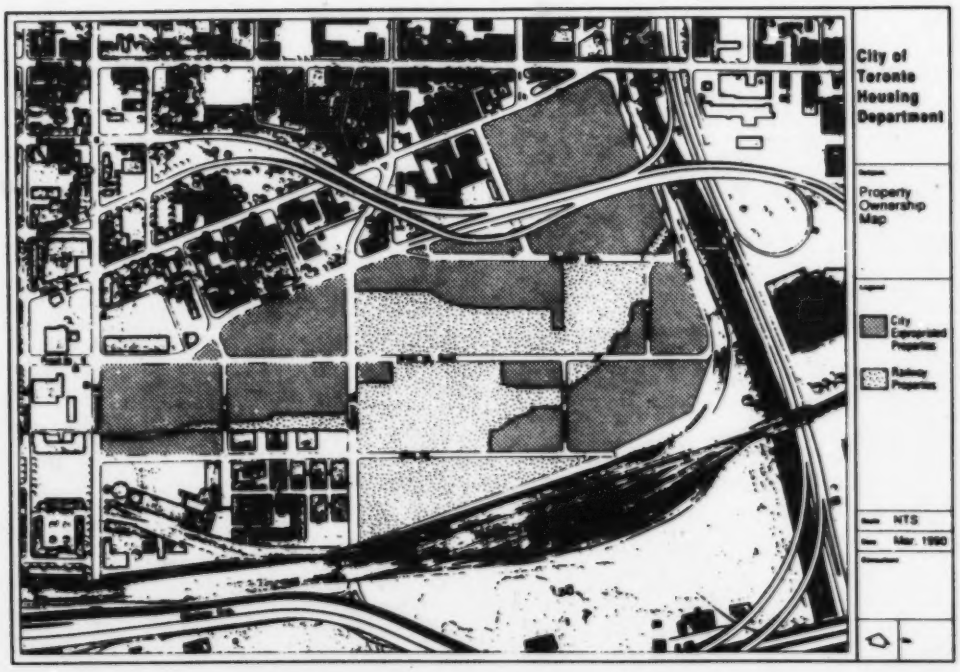
Toronto location. A highly skilled labour force and ready access to technical support services are also cited as major advantages. Indeed, recently completed projects like Scotia Plaza have succeeded in attracting several large firms to the core, including Molson's Ltd., Cigna Insurance and Wang Canada.

Current forecasts indicate an increase in the vacancy rate for downtown commercial space. According to J.J. Barnicke Ltd., the downtown vacancy rate for office space was 7% in 1989. This figure is expected to rise to about 12% in 1991 and a return to a tighter market situation is not anticipated until the mid-1990s. Contributing to the high vacancy rate is the completion of a number of major commercial developments in 1990 including BCE Place (1.2 million sq. ft.), One Finance Place (0.6 million sq. ft.), the Yonge-Richmond Centre (0.3 million sq. ft.) and One Queen Street East (0.4 million sq. ft.). This boom in office construction will result in an oversupply in the downtown market. Rental levels may fall as a result and greater incentives may have to be introduced to attract tenants.

Higher industrial leasing costs have widened the price differential between the central area and the suburbs. This has resulted in a movement of firms from the core to the suburbs. Royal Lepage Ltd., in their market survey for 1990, suggest that this will be a growing trend owing to the redevelopment of older, centrally-located facilities for commercial and non-manufacturing industrial uses. One of the major proposed redevelopments which falls into this category is the Gooderham & Worts Distillery Complex located adjacent to ATARATIRI. These trends

have important implications for meeting the employment-generating goals of ATARATIRI. Careful planning and marketing of the sites for industrial and commercial uses will be critical to generate the best return on the City's investment in ATARATIRI.

FIGURE 2


City of Toronto Housing Department
Property Ownership Map
NTS
Mar. 1990

THE DEVELOPMENT PROCESS: A PROGRESS REPORT

The first business plan for ATARATIRI (St. Lawrence Square Business Plan, January 18, 1989) outlined the four major phases of the development process:

1) land assembly,
2) research and planning,
3) site improvement and servicing and
4) parcel disposition and redevelopment activity.

The following discussion presents a report on the progress made in each of these four areas during 1989.

LAND ASSEMBLY

A key component in the development process for ATARATIRI is the completion of the land assembly. Figure 2 shows the present ownership of properties in ATARATIRI. Considerable effort was expended by the City of Toronto in 1989 to ensure progress on this issue. However, much work remains to be done to successfully conclude the land assembly process. Two issues which will continue to be addressed in 1990 are:

1) to complete the acquisition of the railway lands; and
2) the relocation of the original business tenants.

RAILWAY LANDS

When ATARATIRI was initiated it was believed that the property of the CNR, a Federal Crown Corporation, and of C.P.R, a federally incorporated railway, could not be expropriated. A decision was made to negotiate with both railway companies. A letter of understanding signed by a

ATARATIRI: RELOCATION OF ORIGINAL BUSINESS TENANTS (As of January 15, 1990)

TABLE 3

Relocation Status of Original Business Tenants

RELOCATION STATUS	NUMBER	PERCENTAGE
Not Relocated Yet	15	33
Closed Branch/Business	5	11
Relocation In Progress	2	5
Relocated	23	51
Total	45	100

TABLE 4

Destination of Relocated Business Tenants

DESTINATION	NUMBER	PERCENTAGE
City of Toronto	13	57
Mississauga	3	13
Markham	2	9
Scarborough	2	9
Brampton	1	4
City of York	1	4
North York	1	4
Total	23	100

(Source: Commissioner of City Property)

representative from the City, the Province, Canadian National, and Canadian Pacific was received on July 12th, 1988. Negotiations progressed more slowly than the City would have liked or anticipated, but, at the time of writing, an agreement has been reached on the details of the acquisition transaction. The documentation should be finalized in 1990 with relocation to follow.

RELOCATION OF ORIGINAL BUSINESS TENANTS

The relocation strategy for businesses situated within ATARATIRI was outlined in the initial July 1988 report. This report indicated that, in order to minimize business disturbance, the City would offer relocation assistance to as many firms as possible over a reasonable period of time. Relocation assistance was not to be confined to sites within the City of Toronto. However, every reasonable effort is being made to meet the needs of firms wishing to remain in the City. At the present time, approximately half of the 45 original business tenants in ATARATIRI have now found relocation sites (Table 3). Fifty-seven percent of the relocated businesses have found sites within the City of Toronto. The remainder have relocated to municipalities in the Greater Toronto area (e.g. Mississauga, Markham, Scarborough) (Table 4).

PUBLIC ACCESSIBILITY AND CITIZEN PARTICIPATION

In order to provide public input to the planning process and provide advice to staff on the development of ATARATIRI, City Council established a nineteen-member Neighbourhood Advisory Council (NAC). NAC members represent a wide spectrum of consituencies including neighbourhood groups, business associations and local industry, non-profit and private housing producers, social service and community development agencies and environmental groups. During 1989, in addition to a number of in-conference working sessions, NAC held monthly meetings which were open to the public.

To effectively address the number of issues and review the necessary background research, NAC formed six subcommittees: Environmental; Land Use and Urban Design; Economic Development; Social Structure and Community Services; Finance and Development and Communications. In late 1989 a seventh subcommittee was established to provide public input to the redevelopment of the Gooderham & Worts property which is adjacent to ATARATIRI.

The subcommittees play an important advisory role in the preparation of terms of reference for study proposals, the selection of consultants and the review of draft reports. To facilitate further community involvement in the planning process a number of subcommittees have sponsored and chaired public forums. The general public has responded to these opportunities with enthusiasm and has provided invaluable feedback to NAC and the project staff.

RESEARCH AND PLANNING

An intensive program of research is being undertaken to provide a solid base of information for the preparation of a Master Plan for the community. Research for ATARATIRI has been organized into two phases. The first phase encompassed the detailed research work required for environmental planning and preliminary contextual studies which explored issues such as social structure, urban design, non-residential uses, traffic patterns and parking demand. The bulk of the research in this first phase is complete and the second phase has been initiated. The second phase shifts the research focus to the detailed planning and implementation of such issues as the provision of social and community services, the creation of non-residential uses and the development of a site plan.

ENVIRONMENTAL PLANNING

An Environmental Evaluation Study is underway to ensure a thorough and in-depth analysis of environmental conditions at ATARATIRI. Six major studies are being carried out to identify environmental, health and safety concerns associated with redeveloping the site for mixed use. The findings of the studies will be used to develop an environmental remediation strategy designed to ensure the site will be made suitable for redevelopment.

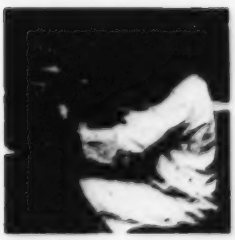
1) Soil and Water Management

   The consultants are building upon the results of

preliminary investigations carried out in 1988. The current research program is testing for contaminants that were not analyzed previously, collecting additional samples to refine the estimated extent of contaminated soil, and sampling storm and groundwater.

The results of these investigations, together with the Health Risk Study, will be used to prepare a comprehensive soil and water management plan. The plan will define areas requiring remediation, identify alternative strategies and recommend a preferred approach for clean-up.

The results suggest that soil contamination is generally confined to the upper one-to-three metres of surficial fill materials which cover the site, the Parliament/Front/Trinity/Millblock and a few other isolated pockets. The contaminants of concern in ATARATIRI include: metals, PAH's and PCBs. In most instances their presence can be attributed to past and present industrial uses. Contamination may also have been brought to the site in imported fill.



Groundwater field investigation has identified two sites of significant concern: the Parliament/Front/ Trinity/Mill block and the Front/Overend block. Discussions are underway with Ministry of the Environment representatives to identify appropriate soil and groundwater quality guidelines and to determine the most appropriate remediation strategy.

2) Air Quality

The study is characterizing present and future ambient air quality in the vicinity of the site. It is addressing topics such as odours, dust, and air toxins where possible. The study will identify sources of emissions that may adversely affect air quality at the site and will recommend measures to reduce or eliminate these effects.

Initial results conclude that, in general, the areas of the site most affected by air pollutants are around its perimeter. Traffic emissions (both car and train) are major contributors. Odours from nearby industries are likely to continue to affect ATARATIRI and the neighbouring communities of St. Lawrence and Corktown. One major source of odour, the Gordon Young Rendering Plant, has been expropriated and will cease operation prior to the occupation of ATARATIRI. Investigations into the effects of off-site industries are still underway.

3) Health Risk

A Health Risk Study is being conducted in order to develop a health-based rationale for the soil and groundwater management plan and for any measures that are needed to improve local air quality conditions. The consultants are working with the data generated by the Soil and Water Management Study and the Air Quality Study. In particular, they will assist in identifying site specific soil quality guidelines for those compounds that have been found at ATARATIRI for which province-wide guidelines do not exist and in determining the

application of guidelines to contaminants at depth.

4) Noise and Vibration

The Noise and Vibration Study has been completed. This study measured present noise and vibration levels at the site. It projected likely future changes in noise and vibration levels owing to increased road and rail traffic, in order to assess their potential impact on the proposed development. The study recommended ways of ameliorating or preventing adverse noise and vibration impacts through site planning, set backs and building design. Discussions have occurred with neighbouring industry on steps to reduce noise.

5) Transportation and Fixed Facility Risk Assessment

The consultants are assessing risks of accidents involving hazardous materials on road and rail corridors and at fixed facilities in the vicinity of the site to future residents and recommending strategies to minimize or eliminate such risks.

Preliminary research findings indicate that the port is unlikely to pose a significant risk to the residents of ATARATIRI as a result of the adequate separation distance. Rail transportation of hazardous materials around ATARATIRI produces comparable risks to those found for other rail segments in the Greater Toronto Area. The southeast corner of the site is exposed to the highest risk as a result of the cumulative effect of the two rail segments, and four road links. This finding will have an important influence in assessing the optimal location for

residential uses. The analysis of road risk has not been completed at this time but it appears that several local streets may be associated with higher risk from the transportation of hazardous materials than nearby expressways.

6) Flood Plain Planning

All of ATARATIRI lies within an area subject to flooding by the Don River. Designation as a Special Policy Area (SPA) is one of the regulatory approaches to permit new development in a flood-prone area, subject to various conditions. These conditions require the City of Toronto to examine a range of flood protection approaches, to investigate the impact of flood mitigation on surrounding lands, and to take into consideration any related environmental issues.

Designation of ATARATIRI as an SPA would recognize the historical development of the area, acknowledge the community-related benefits of the proposed undertaking, and acknowledge a higher degree of flood risk than would normally be acceptable under provincial policy. Flood proofing strategies which could be employed include bridge-widening, dyking and site filling, continued regular dredging of the Keating Channel, sensitive building design, storm water management and emergency procedures. Flood protection of ATARATIRI provides significant benefit to the adjacent neighbourhoods of St. Lawrence and Corktown.

The results of all these studies will be incorporated into a

comprehensive Environmental Evaluation Report. This report will be subject to full public review prior to submission to the Minister of the Environment for approval before the Official Plan Amendment is submitted to the Minister of Municipal Affairs for approval under the Planning Act. The results of the environmental studies will be incorporated into the site planning process, building standards, and the preparation of the ATARATIRI Official Plan and Zoning By-law Amendments.

Additional studies will be carried out where required to address site specific environmental concerns which require further study. For example, soil and water quality management plans will be prepared for each development phase in order to determine how contaminated soil and groundwater at a particular site will be addressed.

LAND USE AND URBAN DESIGN

The purpose of the land use and physical design work program is to prepare the site and massing plan for ATARATIRI. So far, this has proven to be a particularly interesting and challenging exercise that has involved many architects and landscape architects, planners, engineers, students, historians and citizens. For although ATARATIRI will ultimately be home to some 14,000 people, it will be more than just a large housing project in the City. It will be an important part of the City itself.

When the project was initiated, two basic questions

confronted the Project Team: "What is there now?" and "What should there be in the future?".

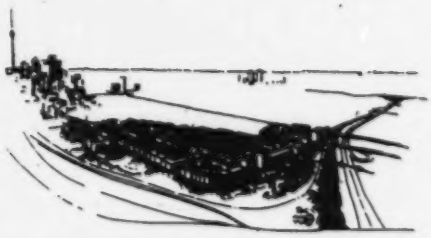
To answer the first question, a survey of existing buildings and structures on the site was carried out. The purpose of this study was to record, catalogue and make a preliminary analysis of which buildings could and should be saved for future reuse. At the same time, an inter-related series of forums, studies, symposia and exhibitions was initiated to determine what ATARATIRI could and should be like in the future. This process started in June, 1989 with a public forum entitled "Building the Neighbourhood". Held at the Canadian Stage on Berkeley Street, near the development area, it was well attended by a broad range of citizens as well as architects, social scientists, environmentalists and developers.

Four consultants were hired to produce eight urban design probes which would identify the significant design issues, constraints and opportunities which exist in ATARATIRI. A range of site planning options was produced which explored different street layouts, building types and heights, open space patterns and land use patterns. The results were displayed in the Rotunda of City Hall and at the University of Toronto School of Architecture. The eight designs were the subject of a well-attended public symposium at the University of Toronto.

A number of the ideas contained in these studies, such as the creation of a natural park along the eastern edge of the site; the preservation of the old Palace Street School Building; the creation of smaller neighbourhoods within

ATARATIRI; the continuation of the City's grid street pattern into ATARATIRI; and the treatment of the Bayview extension, gained a wide measure of support and have been incorporated into an Urban Design Strategy for the site.

Detailed studies, which build on the work of the urban design probes, have just been completed or are nearing completion. These include analyses of building and block design, open space, the design of the road network, parking standards, and the feasibility of centralized neighbourhood heating and cooling. An important recommendation of the Building and Block Study is that the site be designed to permit the construction of a wide variety of building types and sizes to better reflect the diversity and grain of the City. The results of the preceding studies will form the groundwork for the preparation of the site plan, which is presently underway.



SOCIAL STRUCTURE/COMMUNITY AND SOCIAL SERVICES

ATARATIRI is being planned as an integrated, inclusive community composed of households with a variety of income levels, age levels and cultural backgrounds. A General Social Structure Analysis was commissioned to provide recommendations on the social and housing mix of the community. A major focus of the study was an investigation of the housing needs of groups who are particularly vulnerable in today's housing market because of a combination of low income and other special needs circumstances.

The analysis of current social housing waiting lists in Toronto revealed that households comprising single parents with children and young couples with children, represent a significant component of assisted housing demand. A major conclusion of the General Social Structure Analysis is that a planning priority for ATARATIRI should be to maximize the provision of housing for disadvantaged and special needs groups.

In response, the ATARATIRI Neighbourhood Advisory Council has recommended to City Council a housing mix of 60% social housing and 40% market housing. Such a housing mix would still imply a broad range of households with varying income levels. Under the Housing Development Agreement, the Province is committed to provide funding for not less than 35% social housing. The recommended housing mix (60/40) implies a re-negotiation or re-evaluation of certain terms in the Housing Development Agreement. By stating that the 25% "affordable" housing specified in the H.D.A. should be rental housing, the 60/40 proposal maintains within ATARATIRI the ratio of rental to ownership housing existing in the City presently.

The provision of good community and social services will be especially important for the quality of life in ATARATIRI. A study has been commissioned to formulate a general strategy for the implementation of social and community services. The Community and Social Services Study will address such issues as the type, location, quality, capacity and phasing of services. The co-ordination and integration with existing service providers in adjacent neighbourhoods will also be addressed.

Funding sources for social and community services require a considerable amount of lead time. Thus, it is imperative that the planning and co-ordination of social and community services involve the relevant agencies and service providers as early as possible, to ensure that needed services are in place for the residents of ATARATIRI. It is anticipated that negotiations will be well underway by late 1990 to ensure the appropriate provision of community and social services as the housing is built.

ATARATIRI is home to an exciting and innovative project which is encouraging direct action by homeless people in providing shelter. StreetCity, located in the former post office warehouse on Front Street East, has recently been converted into a 72-unit residence. The StreetCity project was initiated in 1987 by a provincially supported group called the Homes First Society. The goal of StreetCity was to find a suitable warehouse for temporary accommodation (the StreetCity lease expires late in 1991) while developing a sense of community. StreetCity is a highly appropriate and socially-motivated temporary use for ATARATIRI.

WORKPLACE AND JOBS

A variety of non-residential uses is being planned to contribute to the diversity of ATARATIRI. The provision of a stable base of 1,500 industrial and commercial jobs represents an increase over the employment base at the time of the expropriation and will provide employment opportunities for local residents. The development of

sites for non-residential uses will provide revenue to offset the development costs associated with the project. A Non-Residential Uses Study was commissioned to provide recommendations on various development options and possible approaches for an implementation strategy.

As expected, the study determined that the most promising growth sectors within the City's economy are associated with office-based businesses. Within the "industrial" category of activity, there has been a significant shift away from traditional manufacturing. A situational analysis of ATARATIRI's economic potential suggests that the communications industry and related information-based technologies hold particular promise. Printing and publishing, telecommunications, film and sound recording, graphic design and photo processing firms are all established in the east downtown area and appear to be doing well. A market niche for data processing and other computer-related activities may also exist in ATARATIRI. These uses are all reasonably compatible with residential neighbourhoods and would appear to be appropriate for ATARATIRI.

Some specialized forms of light manufacturing, particularly labour intensive workshop operations, offer potential as well. ATARATIRI is in close proximity to a number of cultural institutions, for example, the Canadian Stage Company, Canadian Opera Company, and Young People's Theatre, which suggests a potential for artisans' workshops and fine art studios. The presence of the Gooderham & Worts complex of nationally pre-eminent historic buildings provides an exciting and

complementary built-form context for arts and culture-related activities.

SITE IMPROVEMENT AND SERVICING

Preparatory work has begun on this phase of the development process. As noted previously, the first priority is the environmental remediation and floodproofing of the site. The areas of the site with the most serious contamination will be given priority in developing and implementing detailed soil and water management plans. Discussions have already taken place with one major local industry to reduce noise.

Planning is also underway for the provision of hard services and physical infrastructure. Discussions are being held with a number of different agencies and private companies to prepare the groundwork for servicing the site. The Municipality of Metropolitan Toronto, Consumers Gas, Rogers Cable, Bell Canada, Ontario Hydro and Toronto Hydro are among those service providers participating in the planning process.

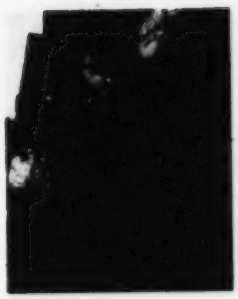
Accessibility to public transportation is a planning priority. Meetings have been held with the TTC to explore ways of meeting the transportation needs of future residents. The potential for centralized neighbourhood heating and cooling, which is energy efficient and therefore environmentally sensitive, is another element of servicing currently being explored. Discussions have been held to ensure comprehensive planning for police, fire and other emergency services.

FINANCE AND DEVELOPMENT PROGRAM

The business plan for ATARATIRI will depend heavily on the acceptance by City Council and the Province of a development master plan and strategy. The Master Plan will determine the form and nature (mix of objectives) of the neighbourhood and the ultimate balance between costs and revenues. On the cost side, previous sections of the report indicated that some significant cost items have to be defined more precisely (e.g. floodproofing, environmental remediation). By the same token, future revenues are to some extent conjectural and will depend heavily on funding through government programs, recoveries from private sales, leases and joint ventures and, above all, on the ability of the City to choose the right moment to put such transactions into effect. Finally, decisions will have to be made about trading off high holding costs against lower projected revenues simply through accelerating the pace of development. A successful bid for the 1996 Olympic Games would require that such a choice be made. The following sections of the report explore the implications of various financial options in greater detail.

CURRENT FINANCIAL PICTURE

Like many major developments the financial structure of ATARATIRI is "front-end loaded": that is, in the early years costs are expected to outweigh revenues by a considerable margin. As the site is improved, through Official Plan and Zoning By-law changes, and by way of environmental upgrading and the provision of a wide range of services, future revenues should offset previous costs. The experience with the St. Lawrence



Neighbourhood has been that, over a long period of time, the project moved to a positive cash flow position. The optimistic projections for ATARATIRI display a similar progression.

The year end financial statement for ATARATIRI is shown on Table 5. Expenditures have reached about one-third of the original, projected, maximum amount of $444 million (1988 dollars). Revenues from various sources, mainly land and building leases, are about the level expected, but will drop substantially as site clearance gets underway later this year.

At the time of writing, the interim financing for the project is being supplied by the City of Toronto from its reserve accounts. The maximum approved expenditure from those reserves is set at $150 million. It can be seen from Table 5 that expenditures are rapidly approaching that level, now being in the $120 million range. The current intention is to repay the City by converting to short-term financing using one of the Canadian chartered banks. Detailed plans for long-term financing are still at an elementary stage and will depend on the resolution of the strategic issues as discussed in the next section.

STRATEGIC DEVELOPMENT ISSUES

Although the planning of the community is still at an elementary stage, some simple simulations of the effects of various development programs on the financial situation have already been undertaken. Likewise, simulations have been undertaken to determine the

TABLE 5

Statement of Source and Application of Funds for ATARATIRI, for the period from July 13, 1988 to December 31, 1989

APPLICATIONS	
Salaries, wages and employee benefits	$ 1,092,635
Printing & office supplies	36,496
Acquisition of office equipment and furniture	82,893
Interest charges on funds advanced by the Corporation of the City of Toronto	11,707,460
Consultants fees	2,465,328
Appraisers fees	522,979
Audit fees	2,000
Acquisition of land and relocation costs	105,392,102
Repairs, maintenance, utilities and taxes	140,940
Miscellaneous expenditures:	
Conventions and travelling expenses	6,267
Advertising	25,405
Meal allowance and official entertainment	11,728
Other	30,452
Total applications	121,516,685
SOURCES OF FINANCING	
Rents from leased properties	5,241,735
Sale of reports and publications	3,550
Interest income	1,605
Interim financing from the Corporation of the City of Toronto	105,639,181
Total sources of financing	$ 110,886,071
UNFINANCED CAPITAL OUTLAY AS AT DECEMBER 31, 1989	$ 10,630,614

(Source: Commissioner of Finance)

TABLE 6

**ATARATIRI Financial Projections -
Optimistic and Pessimistic Scenarios**

NET PRESENT VALUE OF DISCOUNTED CASH FLOW (1)

DISCOUNTING AT 12.5%

HOUSING MIX	12 YEAR (PESSIMISTIC)	12 YEAR (OPTIMISTIC)	7 YEAR (PESSIMISTIC)	7 YEAR (OPTIMISTIC)
Housing Development Agreement (2)	($93.93)	$22.04	($64.73)	$54.62
Sixty-Forty Split (3)	($104.57)	$11.21	($78.90)	$40.45

1. Millions of dollars as of January 1, 1989. Costs and revenues generally compounded at 6% per annum. The net present value (NPV) of an investment at a specified rate of interest is its presentvalue (PV) at that rate of interest minus the cost of the investment.
2. Housing Development Agreement calls for 35% Social Housing, 25% Affordable Housing and 40% Market Housing.
3. This represents 60% Social Housing and 40% Market Housing and is preferred by the Neighbourhood Advisory Council and City Council.
4. Basic assumptions about revenues and costs:
   - Market Housing Land Price (base year): pessimistic scenario - $60,000/unit, optimistic scenario - $75,000/unit;
   - Total Land Settlements: pessimistic scenario - $220 million, optimistic scenario - $185 million;
   - Total Business Settlements: pessimistic scenario - $85 million, optimistic scenario - $65 million;
   - Environmental Improvement: pessimistic scenario - $114.5 million, optimistic scenario - $48 million.

impact of alternative lengths of the development program, the sensitivity of the project to interest rates and alternative staging and block development. These were carried out to assist in forecasting costs and to identify parts of the master plan which need either expenditure control or increased revenues to attain a break-even position.

Given the need for greater certainty with respect to a number of project costs, and further examination of the overall timing and strategic alternatives, the figures contained in Table 6 (and supplemented with greater detail in the Appendix) have been expressed in terms of discounted cash flows (net present values). In short, they represent the accumulated cash position under various assumptions of the estimated costs and revenues of implementing the real estate and development objectives of the new neighbourhood, expressed in 1989 dollars, with the discount rate (implied interest rate) set at 12.5 per cent. This forecasting and analytic approach is commonly used in a development project of this magnitude and nature to test its viability under various scenarios, to illustrate its financial sensitivity to various cost, revenue and time components, and to highlight the strategic issues that need to be addressed. Any negative figure represents the additional amount that would have to be invested today (or to be cut from the project budget) to bring the project to break-even on project completion.

Previous sections of this report have plainly demonstrated that ATARATIRI is at a critical juncture. Key decisions taken in the next six to twelve months will heavily influence the development of the neighbourhood

and its financial success. The following are presently considered to be the critical strategic decisions on the cost side of the equation:

- settlement of the outstanding acquisition issues is of paramount importance because, financially, they constitute the largest share of the budget. As noted before, the expropriation and business settlements are well in hand and should, for the most part, proceed to a satisfactory conclusion by year end;
- the costs of upgrading the physical environment, including floodproofing measures for the area, require early resolution (within four months). So far the environmental studies have produced few surprises and the problems appear to be manageable. However, there are key policy decisions particularly around an acceptable level of flood risk and an acceptable soil and water management plan for the entire site. Each of these has cost implications, as well as implications for the nature and form of the development. ATARATIRI is precedent-setting in these areas and will require flexibility on the part of several provincial departments if it is to proceed expeditiously;
- since the development costs of ATARATIRI greatly outrank the revenues in the early years, it is imperative that the least costly financing technique be promoted. The strength of the provincial guarantees, and the City's credit rating in financial markets, have to be exploited to obtain the most preferential financing available in Canada.

The timing and extent of offsetting revenues is tied, at this time, to a number of key decisions. These are all the subject of investigations at the present time and include

the following:

- choice of the appropriate mix of uses can have a significant impact on revenue generation. If, as is proposed, the residential tenure mix predominantly favours the non-profit sector, then the private residential parcels will have to generate significant revenues. Marketing and selling these parcels at the right time will be critical and demands formulation of an explicit strategy in the next four months;
- the decision whether to offset large, front-end, carrying costs by fast-tracking the development of key parcels should be made by the fall of 1990. Such a decision has to carefully balance the impact of the current low absorption rates in the condominium market, the need to use social housing allocations and the potential for marketing non-residential space at favourable rates;
- the form of the Official Plan and Zoning By-law amendments governing ATARATIRI will greatly influence the financial planning. The combination of sunk costs, carrying charges and revenue projections indicate a more intensive form of development than the St. Lawrence Neighbourhood. The challenge here will be to ensure that the Official Plan and Zoning By-law amendments will result in a community at least as attractive and successful as St. Lawrence and allow development to proceed expeditiously while maintaining adequate controls; and
- if the City of Toronto is successful in its bid for the 1996 Summer Olympic Games then the inclusion of a " Media Village" comprised of about 2500 housing units in ATARATIRI has significant implications for financial planning. Significant savings can be realised

in carrying costs by completing the neighbourhood by 1996.

The next twelve-month period is a critical time for ATARATIRI. It will witness the transition from a lengthy period of site assembly and detailed fact-gathering, analysis and public discussion to an active program of implementation. As this report has noted, key issues are still to be resolved: foremost, the negotiation of the outstanding real estate acquisitions and business settlements and the development of floodproofing and de-commissioning strategies.

CONCLUSION

The key to success in the coming years is to gain consensus on a flexible, but clear-sighted, implementation plan and program. Each component of that plan will require careful attention in the coming years so that the social, financial, environmental and employment goals of ATARATIRI are met successfully. Most important, an implementation strategy must be aggressively pursued early on to give the necessary momentum to the process. This will require, amongst other things, pressure on other levels of government to finance key community services in the early stages, commitments from regulatory agencies to expedite the site improvement process, identification of and negotiations with industrial and commercial developers and commitments from both private and non-profit residential developers early on. The financial commitments which will flow from such negotiations will take the planning of ATARATIRI further along the road to financial self-sufficiency.

APPENDIX

CASH FLOW PROJECTIONS

TABLE 1

TABLE 1a: DEVELOPMENT POTENTIAL AND SEQUENCE (1989-2000) May 8, 1990

BLOCKS (1)	RESIDENTIAL GFA SQ. M.	RESIDENTIAL UNIT COUNT (2)	RETAIL GFA SQ. M.	COMM/INDUST. GFA SQ. M.	INSTIT. GFA SQ. M. (3)	TOTAL GFA SQ. M.	DEVELOPMENT SEQUENCE (RES+RETAIL)	DEVELOPMENT SEQUENCE (COMM/IND.)	DEVELOPMENT SEQUENCE (INSTIT.)
A1	35,280	420	0	27,200	0	62,480	1993/1991	1993/1991	-
A2	36,972	440	660	0	0	37,632	1992/1992	-	-
B	12,870	153	3,550	18,375	0	34,795	1991/1991	1995/1993	-
B1	21,690	258	750	0	0	22,440	1992/1992	-	-
B2	21,690	258	750	0	0	22,440	1991/1991	-	-
B3	7,200	86	0	0	0	7,200	1991/1991	-	-
C1	20,500	244	650	0	5,500	26,650	1991/1991	-	1995/1995
C2	32,310	385	660	0	0	32,970	1994/1992	-	-
C3	32,310	385	660	0	0	32,970	1995/1993	-	-
C4	26,540	316	660	0	0	27,200	1997/1993	-	-
C5	43,380	516	660	0	0	44,040	1999/1994	-	-
H1	3,870	46	0	0	4,500	8,370	1991/1991	-	1991/1991
H2	33,390	398	940	0	0	34,330	1994/1992	-	-
H3	33,390	398	940	0	0	34,330	1995/1993	-	-
H4	33,390	398	940	0	0	34,330	1997/1993	-	-
I1	33,600	400	0	0	0	33,600	1996/1994	-	-
I2	20,500	244	0	0	0	20,500	1998/1994	-	-
J	0	0	0	1,170	0	1,170	-	1994/1994	-
K1	13,680	163	0	7,200	0	20,880	1998/1994	-	-
K2	14,400	171	0	0	0	14,400	2000/1995	2000/1995	-
L	26,400	314	0	0	0	26,400	1999/1995	-	-
M	57,420	684	812	0	0	58,232	2000/1995	-	-
N1	13,600	162	0	0	0	13,600	1993/1991	-	-
N2	41,220	491	1,350	32,650	0	75,220	1991/1992	1991/1991	-
TOTAL	615,602	7,330	13,982	86,595	10,000	726,179			

NOTE: First development sequence date indicates 12-year phasing plan. Second sequence date indicates 7-Year phasing.

TABLE 1b: DEVELOPMENT POTENTIAL AND SEQUENCE (1989-2000) May 8, 1990

BLOCKS (1)	OPEN SPACE AREA SQ. M.	APPROX. DEVELOP. BLOCK AREA SQ. M. (NET)	NET RESIDENTIAL DENSITY (4)	NET INDUST/COMM DENSITY (5)	NET RETAIL DENSITY (6)	NET INSTIT. DENSITY (7)	TOTAL NET DENSITY (F)	TOTAL SITE AREA SQ. M.	TOTAL GROSS DENSITY (9)
A1	0	13,750	2.57	1.98	0.00	0.00	4.54		
A2	0	6,625	5.58	0.00	0.10	0.00	5.68		
B	4,325	9,533	1.35	1.93	0.37	0.00	3.65		
B1	0	5,913	3.67	0.00	0.13	0.00	3.80		
B2	0	5,913	3.67	0.00	0.13	0.00	3.80		
B3	0	784	9.18	0.00	0.00	0.00	9.18		
C1	0	7,925	2.59	0.00	0.08	0.69	3.36		
C2	0	8,125	3.98	0.00	0.08	0.00	4.06		
C3	0	8,125	3.98	0.00	0.08	0.00	4.06		
C4	0	6,525	4.07	0.00	0.10	0.00	4.17		
C5	0	9,325	4.65	0.00	0.07	0.00	4.72		
H1	0	10,625	0.36	0.00	0.00	0.42	0.79		
H2	0	8,125	4.11	0.00	0.12	0.00	4.23		
H3	0	8,125	4.11	0.00	0.12	0.00	4.23		
H4	0	8,125	4.11	0.00	0.12	0.00	4.23		
I1	12,000	6,825	4.92	0.00	0.00	0.00	4.92		
I2	0	3,964	5.17	0.00	0.00	0.00	5.17		
J	0	1,859	0.00	0.63	0.00	0.00	0.63		
K1	0	7,450	1.84	0.97	0.00	0.00	2.80		
K2	0	3,750	3.84	0.00	0.00	0.00	3.84		
L	65,000	6,500	4.06	0.00	0.00	0.00	4.06		
M	0	11,150	5.15	0.00	0.07	0.00	5.22		
N1	0	3,025	4.50	0.00	0.00	0.00	4.50		
N2	0	20,800	1.98	1.57	0.06	0.00	3.62		
TOTAL	81,325	182,866	3.37	0.47	0.08	0.05	3.97	325,160.5	2.23

1. Blocks based on August 10, 1989 preliminary block design plan.
2. Assumes average unit size of 84 sq. m.
3. Assumes institutional at 1X coverage.
4. Net Residential Density = (Residential GFA/Approx. Develop. Block Area).
5. Net Indust/Comm Density = (Indust/Comm GFA/Approx. Develop. Block Area).
6. Net Retail Density = (Retail GFA/Approx. Develop. Block Area).
7. Net Institutional Density = (Institutional GFA/Approx. Develop. Block Area).
8. Total Net Density = (Tot. GFA/Approx. Develop. Block Area).
9. Total Gross Density = (Tot. GFA/Tot. Site Site Area).

TABLE 2

RESIDENTIAL LAND PRICE ESCALATION (1) May 8, 1990

HOUSING DEVELOPMENT AGREEMENT MIX (2)

TYPE OF RESIDENTIAL	1989 (BASE YEAR)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
SOCIAL (3)	$42,700	$45,262	$47,978	$50,856	$53,908	$57,142	$60,571	$64,205	$68,057	$72,141	$76,469	$81,057
AFFORDABLE (4)	$40,000	$42,400	$44,944	$47,641	$50,499	$53,529	$56,741	$60,145	$63,754	$67,579	$71,634	$75,932
MARKET	$60,000	$63,600	$67,416	$71,461	$75,749	$80,294	$85,111	$90,218	$95,631	$101,369	$107,451	$113,898

1. All figures compounded at 6.00% per annum.

2. Housing Development Agreement Mix: 35% Social, 25% Affordable, 40% Market.

3. Base price for Social Housing is set at land value of current average RUP plus 10 percent of average RUP (i.e. ave. 2 bdrm RUP (April 89) = $147,000 (1), ave. land for 2 bdrm (April 89) = $28,000 (2), hence ave. land = $42,7000/unit (i.e. (2)+((1)/10)).

4. Land value for Affordable Housing set arbitrarily at $40,000/unit. Roughly assumes that a family at the 60th percentile earned $52,000 in 1989. At 30 percent GDS, this family can afford to carry about $122,353 in mortgage debt (12 percent and 25 years). Total cost of an affordable 800 sq.ft. starter home: downpayment (20%) of $30,588 plus mortgage debt (80%) of $122,353 equals $152,941.

But, assume the following costs to produce an 800 sq. ft. starter home: land costs - $40,000; hard costs ($90/sq. ft.) - $72,000; soft costs (21% of total cost) - $32,118; and overhead/profit (15% of total cost) - $22,941. Therefore, total production cost equals $167,059.

TABLE 3

RESIDENTIAL LAND PRICE ESCALATION (1) May 8, 1990

SIXTY-FORTY SPLIT MIX (2)

TYPE OF RESIDENTIAL	1989 (BASE YEAR)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
SOCIAL (i) (3)	$42,700	$45,262	$47,978	$50,856	$53,908	$57,142	$60,571	$64,205	$68,057	$72,141	$76,469	$81,057
SOCIAL (ii) (4)	$28,000	$29,680	$31,461	$33,348	$35,349	$37,470	$39,719	$42,102	$44,628	$47,305	$50,144	$53,152
MARKET	$60,000	$63,600	$67,416	$71,461	$75,749	$80,294	$85,111	$90,218	$95,631	$101,369	$107,451	$113,898

1. All figures compounded at 6.00% per annum.

2. Sixty-Forty Split Mix: 60% Social, 40% Market.

3. Base price for Social (i) is set at land value of current average RUP plus 10 percent of average RUP (i.e. ave. 2 bdrm RUP (April 89) = $147,000 (1), ave. land for 2 bdrm (April 89) = $28,000 (2), hence ave. land = $42,7000/unit (i.e. (2)+((1)/10)).

4. Social (ii) is average land for 2 bdrm (April 89) = $28,000.

TABLE 4

NON-RESIDENTIAL LAND PRICE ESCALATION (1) May 8, 1990

TYPE OF LAND USE (2)	1989 (BASE YEAR)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
INDUST/COMM.	$360	$382	$404	$429	$454	$482	$511	$541	$574	$608	$645	$683
INSTITUTIONAL	$360	$382	$404	$429	$454	$482	$511	$541	$574	$608	$645	$683
RETAIL	$180	$191	$202	$214	$227	$241	$255	$271	$287	$304	$322	$342

1. Based on current market estimates of land component per sq. m. of developed G.F.A..

2. All figures compounded at 6.00% per annum.

TABLE 5

NET PRESENT VALUE CALCULATION — May 8, 1990
DISCOUNTING AT 12.5%

PESSIMISTIC 12-YEAR SCENARIO — HOUSING DEVELOPMENT AGREEMENT MIX

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	TOTALS
REVENUES													
1. Interim leases	$6.00	$3.00	$1.50	$0.80	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$11.30
2. Land leases and sales													
· Residential	$0.00	$0.00	$70.20	$40.60	$40.40	$46.60	$54.30	$25.70	$59.60	$31.30	$75.30	$79.40	$523.40
· Industrial/Commercial	$0.00	$0.00	$13.20	$0.00	$12.36	$0.56	$9.38	$0.00	$0.00	$0.00	$0.00	$4.91	$40.41
· Retail	$0.00	$0.00	$1.27	$0.30	$0.00	$0.38	$0.41	$0.00	$0.46	$0.00	$0.21	$0.28	$3.31
· Institutional	$0.00	$0.00	$1.80	$0.00	$0.00	$0.00	$2.80	$0.00	$0.00	$0.00	$0.00	$0.00	$4.60
3. Grants	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Revenues	$6.00	$3.00	$87.97	$41.70	$52.76	$47.54	$66.89	$25.70	$60.06	$31.30	$75.51	$84.59	$583.02
EXPENDITURES													
1. Land Settlements	$104.00	$91.00	$25.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$220.00
2. Business Settlements	$10.00	$25.00	$35.00	$0.00	$0.00	$0.00	$0.00	$5.00	$5.00	$5.00	$0.00	$0.00	$85.00
3. Consulting Services	$4.50	$1.00	$0.75	$0.50	$0.25	$0.20	$0.30	$0.30	$0.30	$0.20	$0.20	$0.10	$8.60
4. Environmental Improvement	$0.00	$30.32	$42.50	$24.27	$12.14	$12.14	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$121.37
5. Hard Infrastructure	$0.00	$5.30	$10.60	$6.36	$6.36	$1.59	$1.59	$0.00	$0.00	$0.00	$0.00	$0.00	$31.80
6. Administrative Overhead	$1.20	$1.00	$0.75	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$7.45
7. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Expenditures	$119.70	$153.62	$114.60	$31.63	$19.25	$14.43	$2.39	$5.80	$5.80	$5.70	$0.70	$0.60	$474.22
NET REVENUES	($113.70)	($150.62)	($26.63)	$10.07	$33.51	$33.11	$64.50	$19.90	$54.26	$25.60	$74.81	$83.99	$108.80
NPV @ 12.5% (Jan. 1, 1989)													($93.95)

TABLE 6

NET PRESENT VALUE CALCULATION — May 8, 1990
DISCOUNTING AT 12.5%

PESSIMISTIC 12-YEAR SCENARIO — SIXTY-FORTY SPLIT MIX

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	TOTALS
REVENUES													
1. Interim leases	$6.00	$3.00	$1.50	$0.80	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$11.30
2. Land leases and sales													
· Residential	$0.00	$0.00	$71.20	$41.20	$40.40	$47.90	$55.10	$18.80	$54.40	$23.60	$65.60	$66.50	$484.50
· Industrial/Commercial	$0.00	$0.00	$13.20	$0.00	$12.36	$0.56	$9.38	$0.00	$0.00	$0.00	$0.00	$4.91	$40.41
· Retail	$0.00	$0.00	$1.27	$0.30	$0.00	$0.38	$0.41	$0.00	$0.46	$0.00	$0.21	$0.28	$3.31
· Institutional	$0.00	$0.00	$1.80	$0.00	$0.00	$0.00	$2.80	$0.00	$0.00	$0.00	$0.00	$0.00	$4.60
3. Grants	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Revenues	$6.00	$3.00	$88.97	$42.30	$52.76	$48.84	$67.69	$18.80	$54.86	$23.60	$65.81	$71.69	$544.12
EXPENDITURES													
1. Land Settlements	$104.00	$91.00	$25.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$220.00
2. Business Settlements	$10.00	$25.00	$35.00	$0.00	$0.00	$0.00	$0.00	$5.00	$5.00	$5.00	$0.00	$0.00	$85.00
3. Consulting Services	$4.50	$1.00	$0.75	$0.50	$0.25	$0.20	$0.30	$0.30	$0.30	$0.20	$0.20	$0.10	$8.60
4. Environmental Improvement	$0.00	$30.32	$42.50	$24.27	$12.14	$12.14	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$121.37
5. Hard Infrastructure	$0.00	$5.30	$10.60	$6.36	$6.36	$1.59	$1.59	$0.00	$0.00	$0.00	$0.00	$0.00	$31.80
6. Administrative Overhead	$1.20	$1.00	$0.75	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$7.45
7. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Expenditures	$119.70	$153.62	$114.60	$31.63	$19.25	$14.43	$2.39	$5.80	$5.80	$5.70	$0.70	$0.60	$474.22
NET REVENUES	($113.70)	($150.62)	($25.63)	$10.67	$33.51	$34.41	$65.30	$13.00	$49.06	$17.90	$65.11	($70.89)	$69.90
NPV @ 12.5% (Jan. 1, 1989)													($104.57)

TABLE 7

NET PRESENT VALUE CALCULATION — May 8, 1990
DISCOUNTING AT 12.5%

OPTIMISTIC 12-YEAR SCENARIO — HOUSING DEVELOPMENT AGREEMENT MIX

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	TOTALS
REVENUES													
1. Interim leases	$6.00	$3.00	$1.50	$0.80	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$11.30
2. Land leases and sales													
- Residential	$0.00	$0.00	$79.90	$45.60	$48.10	$49.30	$61.00	$25.70	$79.10	$33.40	$86.60	$89.90	$508.60
- Industrial/Commercial	$0.00	$0.00	$13.20	$0.00	$12.36	$0.56	$9.38	$0.00	$0.00	$0.00	$0.00	$6.91	$42.41
- Retail	$0.00	$0.00	$1.27	$0.30	$0.00	$0.38	$0.41	$0.00	$0.44	$0.00	$0.21	$0.28	$3.31
- Institutional	$0.00	$0.00	$1.80	$0.00	$0.00	$0.00	$2.80	$0.00	$0.00	$0.00	$0.00	$0.00	$4.60
3. Grants	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Revenues	$6.00	$3.00	$96.67	$46.70	$60.46	$50.24	$73.59	$25.70	$79.56	$33.40	$86.81	$95.09	$648.22
EXPENDITURES													
1. Land Settlements	$104.00	$71.00	$10.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$185.00
2. Business Settlements	$10.00	$20.00	$20.00	$0.00	$0.00	$0.00	$0.00	$5.00	$5.00	$5.00	$0.00	$0.00	$65.00
3. Consulting Services	$4.50	$1.00	$0.75	$0.50	$0.25	$0.20	$0.30	$0.30	$0.30	$0.20	$0.20	$0.10	$8.60
4. Environmental Improvement	$0.00	$12.72	$17.80	$10.18	$5.09	$5.09	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$50.88
5. Hard Infrastructure	$0.00	$5.30	$10.60	$6.36	$6.36	$1.59	$1.59	$0.00	$0.00	$0.00	$0.00	$0.00	$31.80
6. Administrative Overhead	$1.20	$1.00	$0.75	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$7.45
7. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Expenditures	$119.70	$111.02	$59.90	$17.54	$12.20	$7.38	$2.39	$5.80	$5.80	$5.70	$0.70	$0.60	$348.73
NET REVENUES	($113.70)	($108.02)	$36.77	$29.16	$48.26	$42.86	$71.20	$19.90	$84.76	$27.70	$86.11	$94.49	$299.49
NPV @ 12.5% (JAN. 1, 1989)													$22.84

TABLE 8

NET PRESENT VALUE CALCULATION — May 8, 1990
DISCOUNTING AT 12.5%

OPTIMISTIC 12-YEAR SCENARIO — SIXTY-FORTY SPLIT MIX

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	TOTALS
REVENUES													
1. Interim leases	$6.00	$3.00	$1.50	$0.80	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$11.30
2. Land leases and sales													
- Residential	$0.00	$0.00	$79.90	$46.20	$48.10	$50.60	$61.80	$18.80	$84.90	$25.70	$76.90	$76.90	$548.90
- Industrial/Commercial	$0.00	$0.00	$13.20	$0.00	$12.36	$0.56	$9.38	$0.00	$0.00	$0.00	$0.00	$6.91	$42.41
- Retail	$0.00	$0.00	$1.27	$0.30	$0.00	$0.38	$0.41	$0.00	$0.44	$0.00	$0.21	$0.28	$3.31
- Institutional	$0.00	$0.00	$1.80	$0.00	$0.00	$0.00	$2.80	$0.00	$0.00	$0.00	$0.00	$0.00	$4.60
3. Grants	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Revenues	$6.00	$3.00	$97.67	$47.30	$60.46	$51.54	$76.39	$18.80	$85.36	$25.70	$77.11	$84.09	$660.52
EXPENDITURES													
1. Land Settlements	$104.00	$71.00	$10.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$185.00
2. Business Settlements	$10.00	$20.00	$20.00	$0.00	$0.00	$0.00	$0.00	$5.00	$5.00	$5.00	$0.00	$0.00	$65.00
3. Consulting Services	$4.50	$1.00	$0.75	$0.50	$0.25	$0.20	$0.30	$0.30	$0.30	$0.20	$0.20	$0.10	$8.60
4. Environmental Improvement	$0.00	$12.72	$17.80	$10.18	$5.09	$5.09	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$50.88
5. Hard Infrastructure	$0.00	$5.30	$10.60	$6.36	$6.36	$1.59	$1.59	$0.00	$0.00	$0.00	$0.00	$0.00	$31.80
6. Administrative Overhead	$1.20	$1.00	$0.75	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$7.45
7. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Expenditures	$119.70	$111.02	$59.90	$17.54	$12.20	$7.38	$2.39	$5.80	$5.80	$5.70	$0.70	$0.60	$348.73
NET REVENUES	($113.70)	($108.02)	$37.77	$29.76	$48.26	$44.16	$72.00	$13.00	$59.56	$20.00	$76.41	$83.59	$259.79
NPV @ 12.5% (JAN. 1, 1989)													$11.21

TABLE 9

NET PRESENT VALUE CALCULATION — May 8, 1990
DISCOUNTING AT 12.5%

PESSIMISTIC 7-YEAR SCENARIO — HOUSING DEVELOPMENT AGREEMENT MIX

	1989	1990	1991	1992	1993	1994	1995	TOTALS
REVENUES								
1. Interim leases	$6.00	$3.00	$1.50	$0.80	$0.00	$0.00	$0.00	$11.30
2. Land leases and sales								
- Residential	$0.00	$0.00	$75.30	$115.00	$92.50	$84.90	$83.10	$450.80
- Industrial/Commercial	$0.00	$0.00	$24.17	$0.00	$8.34	$0.56	$3.67	$36.74
- Retail	$0.00	$0.00	$0.99	$0.93	$0.72	$0.15	$0.20	$2.99
- Institutional	$0.00	$0.00	$1.80	$0.00	$0.00	$0.00	$2.80	$4.60
3. Grants	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Revenues	$6.00	$3.00	$103.76	$116.73	$101.56	$85.61	$89.77	$506.43
EXPENDITURES								
1. Land Settlements	$104.00	$91.00	$25.00	$0.00	$0.00	$0.00	$0.00	$220.00
2. Business Settlements	$10.00	$25.00	$35.00	$0.00	$5.00	$5.00	$5.00	$85.00
3. Consulting Services	$4.50	$1.50	$1.50	$0.30	$0.30	$0.30	$0.20	$8.60
4. Environmental Improvement	$0.00	$30.32	$42.50	$24.27	$12.14	$12.14	$0.00	$121.37
5. Hard Infrastructure	$0.00	$4.77	$9.54	$6.36	$6.36	$3.18	$1.59	$31.80
6. Administrative Overhead	$1.20	$1.05	$1.05	$1.05	$1.05	$1.05	$1.00	$7.45
7. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Expenditures	$119.70	$153.64	$114.59	$31.98	$24.85	$21.67	$7.79	$474.22
NET REVENUES	($113.70)	($150.64)	($10.83)	$84.75	$76.71	$63.94	$81.98	$32.21
NPV @ 12.5% (JAN. 1, 1989)								($64.73)

TABLE 10

NET PRESENT VALUE CALCULATION — May 8, 1990
DISCOUNTING AT 12.5%

PESSIMISTIC 7-YEAR SCENARIO — SIXTY-FORTY SPLIT MIX

	1989	1990	1991	1992	1993	1994	1995	TOTALS
REVENUES								
1. Interim leases	$6.00	$3.00	$1.50	$0.80	$0.00	$0.00	$0.00	$11.30
2. Land leases and sales								
- Residential	$0.00	$0.00	$76.30	$116.60	$87.50	$68.40	$71.80	$420.60
- Industrial/Commercial	$0.00	$0.00	$24.17	$0.00	$8.34	$0.56	$3.67	$36.74
- Retail	$0.00	$0.00	$0.99	$0.93	$0.72	$0.15	$0.20	$2.99
- Institutional	$0.00	$0.00	$1.80	$0.00	$0.00	$0.00	$2.80	$4.60
3. Grants	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Revenues	$6.00	$3.00	$104.76	$118.33	$96.56	$69.11	$78.47	$476.23
EXPENDITURES								
1. Land Settlements	$104.00	$91.00	$25.00	$0.00	$0.00	$0.00	$0.00	$220.00
2. Business Settlements	$10.00	$25.00	$35.00	$0.00	$5.00	$5.00	$5.00	$85.00
3. Consulting Services	$4.50	$1.50	$1.50	$0.30	$0.30	$0.30	$0.20	$8.60
4. Environmental Improvement	$0.00	$30.32	$42.50	$24.27	$12.14	$12.14	$0.00	$121.37
5. Hard Infrastructure	$0.00	$4.77	$9.54	$6.36	$6.36	$3.18	$1.59	$31.80
6. Administrative Overhead	$1.20	$1.05	$1.05	$1.05	$1.05	$1.05	$1.00	$7.45
7. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Expenditures	$119.70	$153.64	$114.59	$31.98	$24.85	$21.67	$7.79	$474.22
NET REVENUES	($113.70)	($150.64)	($9.83)	$86.35	$71.71	$47.44	$70.68	$2.01
NPV @ 12.5% (JAN. 1, 1989)								($78.90)

TABLE 11

NET PRESENT VALUE CALCULATION — May 8, 1990
DISCOUNTING AT 12.5%

	OPTIMISTIC 7-YEAR SCENARIO				HOUSING DEVELOPMENT AGREEMENT MIX			
	1989	1990	1991	1992	1993	1994	1995	TOTALS
REVENUES								
1. Interim leases	$6.00	$3.00	$1.50	$0.80	$0.00	$0.00	$0.00	$11.30
2. Land leases and sales								
- Residential	$0.00	$0.00	$84.50	$129.10	$103.80	$93.70	$95.00	$506.10
- Industrial/Commercial	$0.00	$0.00	$24.17	$0.00	$8.34	$0.56	$3.67	$36.74
- Retail	$0.00	$0.00	$0.99	$0.93	$0.72	$0.15	$0.20	$2.99
- Institutional	$0.00	$0.00	$1.80	$0.00	$0.00	$0.00	$2.80	$4.60
3. Grants	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Revenues	$6.00	$3.00	$112.96	$130.83	$112.86	$94.41	$101.67	$561.73
EXPENDITURES								
1. Land Settlements	$104.00	$71.00	$10.00	$0.00	$0.00	$0.00	$0.00	$185.00
2. Business Settlements	$10.00	$20.00	$20.00	$0.00	$5.00	$5.00	$5.00	$65.00
3. Consulting Services	$4.50	$1.50	$1.50	$0.30	$0.30	$0.30	$0.20	$8.60
4. Environmental Improvement	$0.00	$12.72	$17.00	$10.18	$5.09	$5.09	$0.00	$50.08
5. Hard Infrastructure	$0.00	$4.77	$9.54	$6.36	$6.36	$3.18	$1.59	$31.80
6. Administrative Overhead	$1.20	$1.05	$1.05	$1.05	$1.05	$1.05	$1.00	$7.45
7. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Expenditures	$119.70	$111.04	$59.09	$17.89	$17.80	$14.62	$7.79	$348.73
NET REVENUES	($113.70)	($108.04)	$53.87	$112.94	$95.06	$79.79	$93.88	$213.00
NPV @ 12.5% (JAN. 1, 1989)								$54.62

TABLE 12

NET PRESENT VALUE CALCULATION — May 8, 1990
DISCOUNTING AT 12.5%

	OPTIMISTIC 7-YEAR SCENARIO				SIXTY-FORTY SPLIT MIX			
	1989	1990	1991	1992	1993	1994	1995	TOTALS
REVENUES								
1. Interim leases	$6.00	$3.00	$1.50	$0.80	$0.00	$0.00	$0.00	$11.30
2. Land leases and sales								
- Residential	$0.00	$0.00	$85.50	$130.70	$98.80	$77.20	$83.70	$475.90
- Industrial/Commercial	$0.00	$0.00	$24.17	$0.00	$8.34	$0.56	$3.67	$36.74
- Retail	$0.00	$0.00	$0.99	$0.93	$0.72	$0.15	$0.20	$2.99
- Institutional	$0.00	$0.00	$1.80	$0.00	$0.00	$0.00	$2.80	$4.60
3. Grants	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Revenues	$6.00	$3.00	$113.96	$132.43	$107.86	$77.91	$90.37	$531.53
EXPENDITURES								
1. Land Settlements	$104.00	$71.00	$10.00	$0.00	$0.00	$0.00	$0.00	$185.00
2. Business Settlements	$10.00	$20.00	$20.00	$0.00	$5.00	$5.00	$5.00	$65.00
3. Consulting Services	$4.50	$1.50	$1.50	$0.30	$0.30	$0.30	$0.20	$8.60
4. Environmental Improvement	$0.00	$12.72	$17.00	$10.18	$5.09	$5.09	$0.00	$50.08
5. Hard Infrastructure	$0.00	$4.77	$9.54	$6.36	$6.36	$3.18	$1.59	$31.80
6. Administrative Overhead	$1.20	$1.05	$1.05	$1.05	$1.05	$1.05	$1.00	$7.45
7. Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Expenditures	$119.70	$111.04	$59.09	$17.89	$17.80	$14.62	$7.79	$348.73
NET REVENUES	($113.70)	($108.04)	$54.87	$114.54	$90.06	$63.29	$82.58	$182.80
NPV @ 12.5% (JAN. 1, 1989)								$40.45